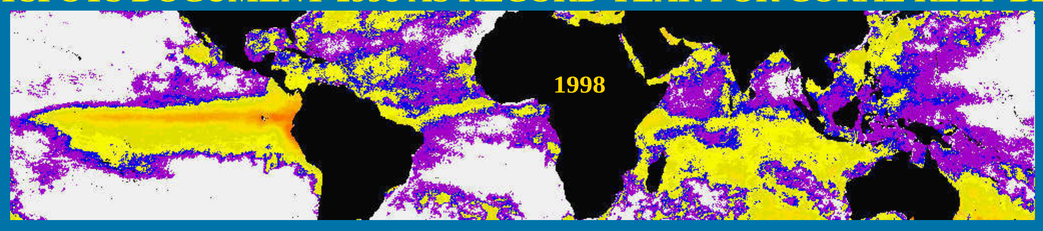
NOAA SATELLITES MONITOR CORAL BLEACHING

NOAA HOTSPOTS DOCUMENT 1998 AS RECORD YEAR FOR CORAL REEF BLEACHING



COMPOSITE 1998 "HOTSPOTS"

HEATING IN ºC ABOVE NORMAL ANNUAL MAXIMUM SST

NOAA SATELLITE AVHRR"HOTSPOT" CHARTS ACCURATELY IDENTIFIED AREAS OF 1998 CORAL REEF BLEACHING, IN THE U.S. AND ABROAD.
THE "HOTSPOT" ANOMALY INDICATES WHERE SEA SURFACE TEMPERATURES (SSTs) ARE *GREATER THAN NORMAL SUMMER MAXIMUM* SSTs. "HOTSPOTS" OF ONE OR MORE ºC (YELLOW AREA) OVER CORAL REEFS ARE A PRECURSOR TO CORAL BLEACHING.

ANNUAL "HOTSPOT" MAPS (1982-1997)

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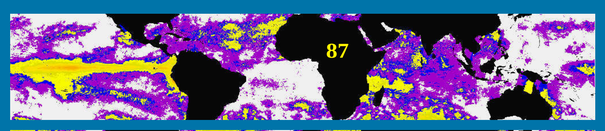

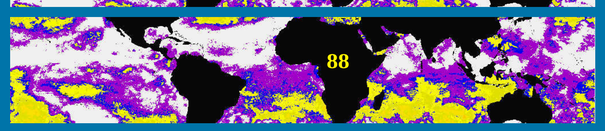

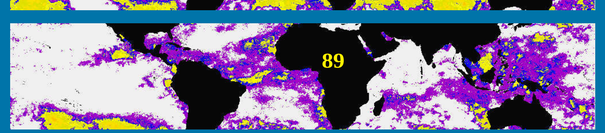

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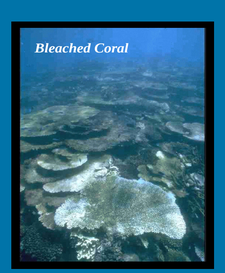
The "HotSpot"time series above documents a distinct shift to warmer maximum ocean temperatures. Continued warming will impose long-term consequences on coral reefs, including increased frequency of bleaching events, disease outbreaks, and mass mortality worldwide.



http://manati.wwb.noaa.gov/orad/

NOAA/NESDIS/ORAD - AE STRONG, MA TOSCANO, EM MATURI

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Australian Institute of Marine Science, & Great Barrier Reef Marine Park Authority